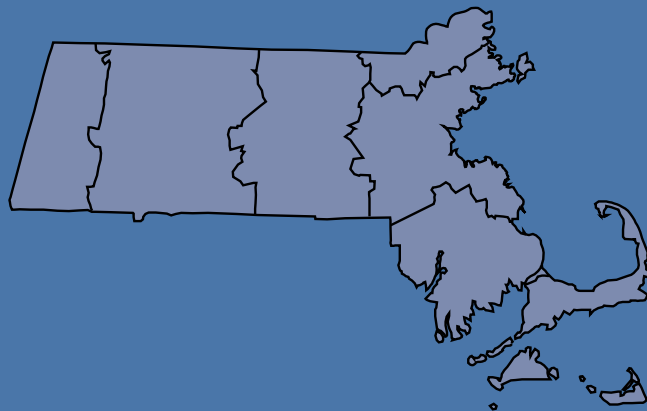


toward a new prosperity: building regional competitiveness across the commonwealth



Massachusetts has undergone a profound economic transition over the past ten years. As our old manufacturing base lost much of its competitive edge, we adapted – by necessity as much as by choice – to a “New Economy” characterized by knowledge-intensive production, high-tech innovation, and global trading.

This “New Economy” is about consistent and fundamental changes that have permanently altered the way in which prosperity is created. Rapidly advancing technologies are transforming industries, firms, and the very nature of work itself. In this environment, ideas and knowledge increasingly determine competitive advantage. Markets and competition are increasingly global in scope.

These new economic conditions present Massachusetts with a new set of challenges. Continued progress will require well-targeted educational and infrastructure investments. While many parts of the Commonwealth prospered during the 1990s, not all regions and citizens have adapted successfully to these changing economic conditions. Keeping the Massachusetts economy vibrant requires a more active role for State government in promoting economic development. This Report proposes a strategic framework for the economic development of the Commonwealth designed to meet the challenges of the “New Economy:”

Part I, summarized below, examines the new dynamics of the Massachusetts economy and advocates the benefits of a shared vision for economic development. It presents a strategic framework

for policy development by highlighting competitive imperatives that must be addressed to ensure our economic future.

Part II profiles the seven distinct economic regions of the Commonwealth (see map above). Economic development is typically a local and regional process. This Report recognizes that successful strategies for the Pioneer Valley and the Southeast region will likely require significantly different initiatives. These profiles provide an overview of recent economic changes in each region and identify the opportunities and challenges they face.

Part III outlines policy options that are designed to promote a healthy debate around the economic future of the Commonwealth and its regions.

The New Dynamics of the Massachusetts Knowledge-Based Economy

The Commonwealth’s shift from manufacturing to a knowledge-based economy has involved a dramatic transformation. Considering our difficult economic position in the early 1990s, the performance of the Massachusetts economy in the years since has been remarkable. However, significant challenges remain.

As described in Part I of this Report, four factors have driven our prosperity in this evolving economy. Deficits in these areas have likewise limited our success:

• **Factor 1: An increasing reliance on *knowledge workers***

The distinguishing characteristic of the Commonwealth's new economy is the high educational attainment of our workforce. Thirty-three percent of our workers have college degrees, a figure more than eight percentage points above the national average. Our relative advantage in graduate and professional degrees is even greater. This differential, which emerged over the past twenty-five years, is closely tied to the growth of our knowledge-based export sector.

During the 1990s, workers lacking a college degree experienced little income growth. In fact, after controlling for inflation, many of our less well-educated workers actually saw their wages decline during the 1990s. Further, according to a study by MassINC, fully one third of our workers still lack the skills needed to compute or communicate at a basic level. Providing workers with the skills required to succeed in the knowledge economy present a critical economic development challenge.

• **Factor 2: The critical importance of vibrant *industry clusters* that rely on *networked entrepreneurship* to innovate, increase productivity, and compete successfully**

The Massachusetts export sector – the firms that sell goods and services outside the State and bring income into the Commonwealth – is increasingly composed of small or mid-sized firms organized into “*industry clusters*.” Small or less hierarchical organizations are often best suited to capture the judgment, creativity, and innovative energy of knowledge workers. Firms in the same industry cluster in a specific geographic area tend to take advantage of local pools of specialized workers, suppliers, financiers, marketers, and infrastructure resources that enhance their competitive position. Our export sector can be grouped into six broad clusters, the first four of which rely primarily on knowledge workers:

► **Information Technology**

Computer and communications equipment, software, and services

► **Health Care**

Health services, medical equipment and devices, and biotechnology and pharmaceuticals

► **Financial Services**

Banking, insurance carriers, and securities and exchange services

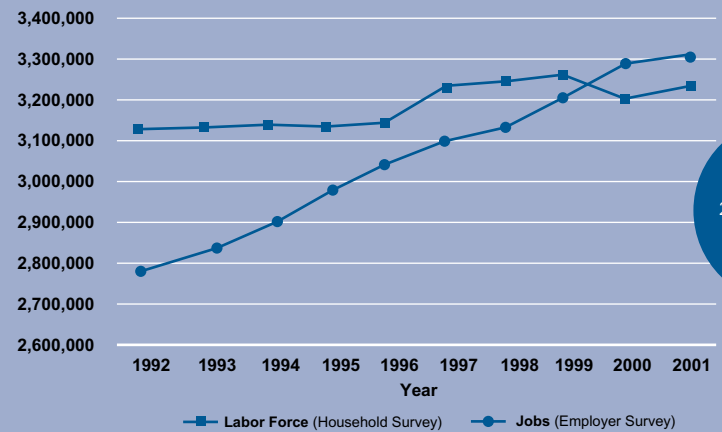
► **Knowledge Creation**

A broad cluster that supports the creation of knowledge based assets and includes higher education, printing and publishing, and legal, engineering, management, and R&D services

► **Traditional Manufacturing**

Paper, rubber and plastics, fabricated metals, apparel and textiles, industrial machinery (except those included under information technology), instruments (except information technology or health care), and all other manufacturing industries

Number of jobs exceeds labor force by 2000



► **Travel and Tourism**

Combines retail establishments and hotel and travel operators that serve business and leisure travelers. These firms provide experiences enjoyed by increasing numbers of visitors from outside the region

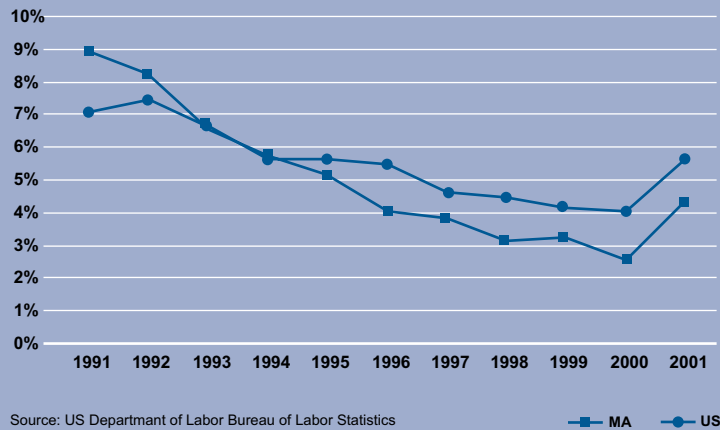
Firms in our four knowledge-based clusters continually access resources through *networked entrepreneurship*. They use contacts and relationships to arrange technical transfers and partnerships with universities and other enterprises; to develop investment relationships with venture capitalists, institutional investors, and major corporations and; to fashion marketing agreements and other liaisons that are the key competitive tools in rapidly-shifting knowledge-based economies.

A major challenge to their success is the growing strength of the states that Massachusetts regularly competes with in academic research and in winning federal R&D funds. In our Traditional Manufacturing and Travel and Tourism clusters, organizing vehicles for networked entrepreneurship has been difficult and a major obstacle to their economic progress. Developing such vehicles is a major challenge going forward.

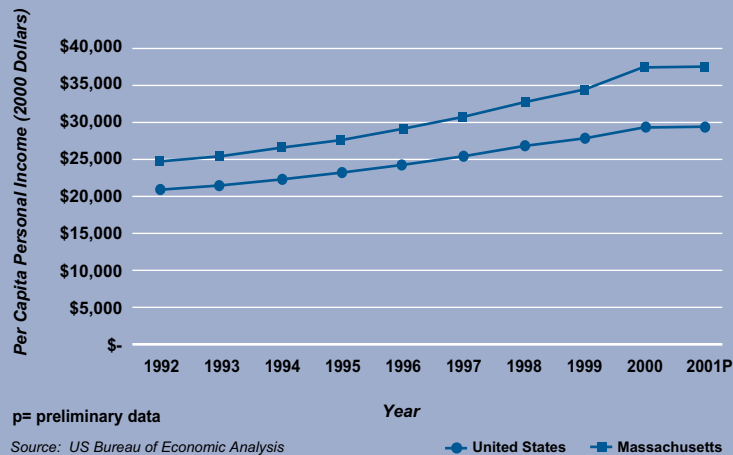
• **Factor 3: Accessing the great commercial opportunities created by *global trade***

The expansion of international markets has created enormous opportunities for our knowledge-based clusters. Exports, overseas sales by affiliates, and international financings and technology transfers have become fundamental components of economic success. As the Internet becomes a more potent factor in reducing the importance of distance, global trading opportunities will emerge for many more firms. The challenge moving forward is to assure easy and affordable access to the Internet, to manage the volatility generated by the international economy, and to swiftly and effectively respond to the security threats raised by the enemies of globalization.

Unemployment rates show steady declines...



...and real per capita income leads the national average



• Factor 4: The growing importance of *place* as a competitive factor

While we work in industry clusters that increasingly compete in the global marketplace, we still live in local communities. The quality of life in our cities and towns has become a critical component of the “income” our economy generates. Since knowledge workers are increasingly mobile and live where they choose, maintaining an affordable cost of living and a high quality of life in the Commonwealth will be critical to our future competitive success.

Economic growth in the 1990s was accompanied by a sharp spike in housing costs in most regions of the Commonwealth. It also generated a significant amount of sprawl, which increased pollution and congestion and weakened many communities. Our challenge, then, is for economic development to strengthen, not diminish, the quality of life in the Commonwealth.

A Shared Vision for the Commonwealth

We propose a vision for economic development that targets a high quality of life for the citizens of the Commonwealth. Achieving this vision is the objective of future economic development efforts. Our proposed vision includes:

Traditional economic development goals

- ▶ High and rising real incomes
- ▶ Job growth

A shared prosperity

- ▶ Strong regional and community-based economies
- ▶ Broad economic opportunity

A prosperity that is sustainable and that strengthens our environmental and civic objectives

- ▶ Environmental sustainability
- ▶ Healthy and safe citizens
- ▶ A strong civic culture

The Commonwealth has done well over the past decade on some of these measures and not so well on others. At the beginning of the 1990s, our economy was clearly in a precarious position. The decade began with sharp declines in our leading minicomputer and defense industries, the collapse of one of our largest banks, and a prolonged credit crunch.

Our recovery since then has been quite strong (see figures, on left). Per capita income has risen sharply and Massachusetts has enjoyed vigorous job growth and a sharp drop in unemployment. The Commonwealth also made substantial gains in environmental management. This prosperity, however, has not been shared throughout the Commonwealth or by all members of society (see figures, on right).

A Strategic Framework for Economic Development

Now and in the future, the Commonwealth must build on its strengths, address its weaknesses, and promote a high quality of life for all of its residents. This Report proposes a strategic framework composed of six competitive imperatives. We believe that, in addressing these imperatives, the Commonwealth can achieve our proposed vision for economic development. The Report also offers policy options that are designed to promote and inform a healthy debate around the economic future of the Commonwealth and its regions. This debate should focus on the how to address the following competitive imperatives:

• Improve the business climate to support all industry clusters

Vibrant and innovative export industry clusters are the primary engines of economic growth today. In traditional, as well as knowledge-based sectors of the economy, such clusters support and motivate innovation, which enhances our overall competitive position. We need to support the development of strong export clusters in all regions of the Commonwealth.

- **Support entrepreneurship and innovation**

Strengthening the Commonwealth's innovation infrastructure will give entrepreneurs better access to the resources they need by improving channels of communication and coordination. We must take aggressive action to reduce disparities in business resources that support innovation and improve access to capital in all regions of the Commonwealth.

- **Prepare the workforce of the 21st century**

A well-educated and highly skilled workforce is essential to competitiveness in today's economy. Our firms must have access to talent they need to succeed and our workers must have skills that match the opportunities emerging in this constantly evolving competitive marketplace.

- **Build the information infrastructure of the 21st century**

The Commonwealth has made enormous transportation investments, most visibly in roads, bridges, and air transportation. The rise of the information economy requires a renewed focus on our information infrastructure. The Commonwealth must facilitate improved access to affordable broadband options throughout the Commonwealth.

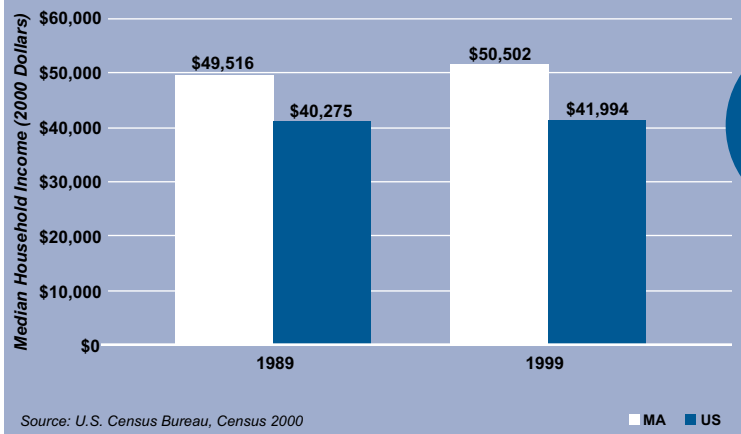
- **Ensure that economic growth is compatible with community and environment**

Housing affordability is fundamental to accommodating a growing economy. At the same time, we must be a leader in implementing sustainable growth strategies that ensure a high quality of life in our cities and towns.

- **Improve the outcomes of government action**

Massachusetts is widely perceived as having significantly improved its business climate over the past decade. We must continue to reduce regulatory burdens and provide more coordinated services and resources to businesses—particularly small businesses. State government must also help collaborate with the private sector and the federal government to effectively respond to the emerging terrorism threats. State government must also maintain confidence in basic infrastructure linking global production, communication, and transportation networks.

Real median household income is flat...



...and real average wages vary by region

